

IN THE CLAIMS:

Please cancel claims 1- 31, without prejudice.

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims

1-31 (Cancelled)

32. (New) An isolated nucleic acid consisting of SEQ ID NO:2 or SEQ ID NO:9.

33. (New) An isolated nucleic acid comprising SEQ ID NO:2 or SEQ ID NO:9.

34. (New) An isolated nucleic acid encoding a polypeptide comprising a sequence as set forth in SEQ ID NO:1 or 10.

35. (New) An isolated nucleic acid comprising a strand that hybridizes under high stringency conditions to a single stranded probe, the sequence of which probe consists of SEQ ID NO:2 or 9 or the complement thereof, wherein the nucleic acid encodes a polypeptide that contains at least one bromodomain and binds to a protein selected from the group consisting of . hSNF2H, hSNF2L, NCoA-62/Skip and homologues thereof, and wherein the high stringency conditions comprise hybridization at 65 °C and washing in 2X SSC containing 0.1% SDS.

36. (New) The nucleic acid of claim 35, wherein the polypeptide comprises a sequence of as set forth in SEQ ID NO:1 or 10.

37. (New) The nucleic acid of claim 35, wherein the strand is at least 15 nucleotides in length.
38. (New) The nucleic acid of claim 37, wherein the strand is at least 351 nucleotides in length.
39. (New) The nucleic acid of claim 38, wherein the strand is at least 2200 nucleotides in length.
40. (New) A vector comprising the nucleic acid of claim 32.
41. (New) A vector comprising the nucleic acid of claim 33.
42. (New) A vector comprising the nucleic acid of claim 34.
43. (New) A vector comprising the nucleic acid of claim 35.
44. (New) A cultured host cell comprising the nucleic acid of claim 32.
45. (New) A cultured host cell comprising the nucleic acid of claim 33.
46. (New) A cultured host cell comprising the nucleic acid of claim 34.
47. (New) A cultured host cell comprising the nucleic acid of claim 35.
48. (New) A method of producing a polypeptide, the method comprising culturing the cultured host cell of claim 44 in a culture, expressing the polypeptide encoded by the nucleic acid in the cultured host cell, and isolating the polypeptide from the culture.

49. (New) An isolated nucleic acid encoding a polypeptide the sequence of which comprise the amino acid sequence of SEQ ID NO:1 or SEQ ID NO:10 with 0 to 50 conservative amino acid substitutions, wherein the polypeptide contains at least one bromodomain and binds to a protein selected from the group consisting of . hSNF2H, hSNF2L, NCoA-62/Skip and homologues thereof.

50. (New) The isolated nucleic acid of claim 49, wherein the number of conservative amino acid substitutions is 0 to 30.

51. (New) The isolated nucleic acid of claim 49, wherein the number of conservative amino acid substitutions is 0 to 10.

52. (New) An isolated nucleic acid comprising a nucleotide sequence that is at least 70% homologous to SEQ ID NO:2 or SEQ ID NO:9, wherein the nucleic acid encodes a polypeptide that contains at least one bromodomain and binds to a protein selected from the group consisting of . hSNF2H, hSNF2L, NCoA-62/Skip and homologues thereof.

53. (New) The isolated nucleic acid of claim 52, wherein the nucleotide sequence is at least 90% homologous to SEQ ID NO:2 or SEQ ID NO:9.

54. (New) The isolated nucleic acid of claim 52, wherein the nucleotide sequence is at least 95% homologous to SEQ ID NO:2 or SEQ ID NO:9.

55. (New) An isolated nucleic acid comprising a sequence that encodes a polypeptide the amino acid sequence of which is at least 60% identical to SEQ ID NO:1 or SEQ ID NO:10, wherein the polypeptide contains at least one bromodomain and binds to a protein selected from the group consisting of . hSNF2H, hSNF2L, NCoA-62/Skip and homologues thereof.

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Attorney's Docket No.: 14875-068002 / C2-001PCT-

Serial No. :

USD1

Filed : Herewith

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56. (New) The isolated nucleic acid of claim 55, wherein the amino acid sequence is at least 80% identical to SEQ ID NO:1 or SEQ ID NO:10.

57. (New) The isolated nucleic acid of claim 55, wherein the amino acid sequence is at least 95% identical to SEQ ID NO:1 or SEQ ID NO:10.